

10 megaton Mike effects fake news propaganda
published by Chuck Hansen and Richard Rhodes
is debunked by their own misquoted source
document, Neal H. Hines's *Proving Ground*

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"The survival of the [Engebi Island, Eniwetok Atoll] rats in the face of repeated atomic bombardment had seemed in 1955 a circumstance approaching the phenomenal. Even more so was the continued health of the colonies which fed on the mildly contaminated grasses growing in [heavily] irradiated soils of Engebi's stark plain. The case was important because it seemed to bear so directly on one of the broadest of the unanswered questions of the nuclear age, the effect on warm-blooded vertebrate animals of continued exposure to low-level irradiation."

- Neal O. Hines, *Proving Ground: An Account of the Radiobiological Studies in the Pacific, 1946-1961*, University of Washington Press, Seattle, 1962, page 297 (ignored by the totally misleadingly quotations from this book given by Chuck Hansen and by Richard Rhodes!).

1 Fake news debunked by the *same* cited book as the quotes by Chuck Hansen and Richard Rhodes!

Neal H. Hines's *Proving Ground: An Account of the Radiobiological Studies in the Pacific, 1946-1961* (University of Washington Press, Seattle, 1962) states on page 141:

- ... on Rigili on November 5 [1952, following the 10 Megaton Mike test] and on Runit the next day, the visible effects of the Mike shot began to be encountered. Rigili is 14 miles SSW down the lagoon from the Mike shot crater. Yet there the survey team found that the trees and brush facing the test site had been scorched and wilted by the thermonuclear heat. Many of the terns there were sick, some grounded and reluctant to

fly, and some with singed feathers, particularly the noddy terns and the sooty terns, whose feathers are dark in color.

They didn't duck and cover. A couple of pages further on, Hines then makes the tragic error of recording superficial, fake news type observations without including an immediate warning to the reader about superficial first-impressions (not scientific; you always need to dig deep in science), on page 143:

- On that day, November 8 [1952] ... At Engebi, the group went ashore on an island where the sense of desolation was deepened by the presence of the reinforced concrete building, ruptured and shaken but still standing, on the island flat that had been swept by the blast and by the succeeding surge of water. ***The body of a bird was seen, but no living animals and only the stumps of vegetation.*** [Emphasis added to oft-quoted lying propaganda, fake news!] ... on the island areas the survey meters indicated radiation was at 2 to 2.5 R/hour ... Among the specimens collected were fish which seemed to have been burned. On each of these fish the skin was missing from one side of it [the side exposed to the fireball] as if, as field notes said at the time, the animal 'had been dropped into a hot pan'.

What Chuck Hansen and Richard Rhodes love to quote is the even more bizarre fake news (disproved soon after) ill-informed speculations Hines makes from superficial views, on page 151:

- No rats at all were [at *first* inspection!] found on Engebi, yet it was there, much later, that one of the most interesting problems would arise [*rats were there, but in blast and radiation hard burrows, hidden from superficial view!*]. ***The exposure of Engebi to the effects of the Mike shot made it seem impossible that rats had survived. The view was expressed in a subsequent summary by Lowman, who said that there was 'little probability' that rats lived through the heat, the shock wave, the rush of water, and the nuclear radiations that Mike had inflicted on the island.*** [Emphasis added to fake news that the anti-civil defense, anti-nuclear deterrence bigoted liars love to quote!] Members of the rat colonies apparently did live through the holocaust, however, and the questions presented by this circumstance would intrigue the investigators for years.

What Chuck Hansen in his 1988 *US Nuclear Weapons* and Richard Rhodes in his 1995 *Dark Sun* won't tell you, is that Hines later in his book explained that rats survived 10 megaton Mike nearby despite all these effects, which big shots failed to read or reveal to their readers. Hines, on page 209:

- The rats of Engebi ... members of the *Rattus exulans* [Polynesian rat] species ... are herbivorous, although insects form a portion of their diet, and at Engebi ... Their nests, composed of loosely matted grass stems,

usually are built in burrows 6 to 12 inches below the surface of the ground, but occasionally the tunnels extend to 18 to 24 inches below the surface, or nests are found immediately beneath boards, slabs of concrete, or nests are found immediately beneath boards, slabs of concrete, or protective rubble. ... In 1955, the rats of Engebi were living on a treeless plain they fed on the seeds of *Lepturus*, *Thuarea*, and *Fimbristylis* and on the leaves of *Triumfetta* and *Sida*, all common grass plants ...

It's pathetic, not merely funny, that this bit on rats in self-made underground nuclear shelters surviving 10 megaton Mike in isn't quoted by Chuck Hansen, Richard Rhodes, or given prominent attention by Stanley Kubrick's character *Dr Strangelove* in the 1964 film starring Peter Sellers as a mad Nazi version of Herman Kahn who claims we need 'minshafts' to survive nuclear war, not cheap improvised shelters (of the kind rats use to stay out of the midday heat and cold nights)!

But we ain't finished yet, matey! 10 megaton Mike in 1952 wasn't the first or the last nuclear weapon test to nuke the rats without injury! They had *repeated* exposures, starting in 1951 with *Operation Greenhouse*! Hines on pages 210-212:

- Lowman calculated that the Easy shot, during Operation Greenhouse, resulted in an initial gamma dose of from 6,400 to 10,000 roentgens in the centre of the [rat] colony. ... Residual nuclear radiation levels following the Mike shot were very high. Animals aboveground would have received 2,800 to 6,700 roentgens during the first hour, and those in burrows 112 to 1,120 roentgens. During the first 9 days following detonation, rats in burrows received 250 to 2,500 roentgens of total integrated dose. ... The total integrated residual nuclear radiation dose for the center of the colony a week after the [1.69 megaton yield] Nectar detonation [of Operation Castle, 1954, another test at Eniwetok Atoll] was 65 roentgens of gamma ... Several animals collected 9 days after Nectar had beta burns as well as thermal burns ... by the most careful investigation of the evidence, the rats of Engebi were completely isolated, there had been no opportunity for immigration of animals from other sites, and the apparently thriving colonies of 1955 represented the natural rebuilding of populations that had been reduced four times by nuclear detonations. ...
- The Eniwetok islet nearest Engebi is Muzin, only 1,300 feet to the south-east, yet between that islet and Engebi there is a continuous flow of water which ... varies in velocity from 1 to 2.5 feet/second and in depth from 6 inches to 10 feet. The neighboring island to the north-west is approximately 6,000 feet away and no rats ever had been observed there. Furthermore, no rats ever had been found swimming in the water off any of the islands at Eniwetok. ... the circumstances of of rats' survival deserved specific investigation. Studies of the effects of internal exposure of the rats were conducted by Lowman ... radioactive materials had entered ... by inhalation, by ingestion of contaminants in water and food and on the fur, and through open wounds.

- Iodine 131 appeared to the principal isotope gaining entry by inhalation. After the Nectar detonation concentrations in the thyroid were at levels considered excessive, but ... within 9 weeks activity in the thyroid was so low that measurement was difficult [iodine 131's half life is just 8 days]. The day following detonation of the Nectar shot, specific activity of the skin was just below that of the thyroid, with specific activity still lower in the gut, bone, lung, kidney, muscle, and liver. ... most of the radioactivity in muscle was due to the presence of Cesium-137, and no Strontium-89/-90 was found in that tissue. In bone, however, isotopes included rare earths (approximately 20 percent), small amounts of zirconium and niobium, and strontium-89/-90 at a level of about 10 percent of the total activity present ... no bone tumors have been discovered, and none was found in specimens collected later.

On page 216, Hines quotes Samuel Glasstone's February 1955 US Atomic Energy Commission unclassified report on the effects of the 15 megaton Bravo nuclear test at Bikini Atoll on totally *unprotected people* downwind on Rongelap (Glasstone was editing a revision of *The Effects of Atomic Weapons*, eventually published as *The Effects of Nuclear Weapons* in 1957, but was pushed by USAEC Chair Lewis Strauss to issue a summary of Bravo effects sooner than the book, to end media speculations; this February 1955 report was not issued in the form Glasstone drafted it because it was personally edited by President Eisenhower himself prior to release, e.g. Ike is reported to have underlined the word "might" below, putting it into italic font!), as follows:

- Inside Bikini Atoll, at a point 10 miles downwind from the explosion, it is estimated that the radiation dosage was about 5,000 roentgens for the first 36 hour period ... The highest radiation measurement outside of Bikini Atoll indicated a dosage of 2,300 roentgens for the same period. This was in the northwestern part of Rongelap Atoll, about 100 miles from the point of detonation. ... about 7,000 square miles of territory downwind from the point of burst was so contaminated [defined as ≥ 300 roentgens in the first 36 hours period] that survival *might* have depended upon prompt evacuation of the area, or upon taking shelter and other protective measures.

Hines adds on page 217:

- By August 1955, the Laboratory had forwarded to the [US Atomic Energy] Commission a report of its analysis of 1,499 biological and soil and water specimens collected at Rongelap in 1954 and on January 25 to 30, 1955. The report gave particular attention to atoll products used by the natives for food ... Samples of coconut meat collected on March 26, 1954 averaged 1.16 microcuries of total beta activity per kilogram of wet tissue, while by January 30, 1955, the level had declined to 0.036. Fish muscle on March 26 averaged 2.74 microcuries, but fish liver averaged 204.0. Ten months later, the values of fish muscle and liver had dropped to .10 and 3.52 ...

Similar declines were found in clam muscle, crab muscle, the liver and muscle of birds, and in squash, papaya, arrowroot, and pandanus.

Hines then debunks Strontium-90 fallout hysteria (*it's simply crowded out by calcium, in CaCO_3 coral Atolls, which is precisely why good civil defense manuals tell farmers to lime their fields in the aftermath of a nuclear war, to cut out Strontium-90 uptake hazards from food*) on page 220:

- The Strontium-90 matters were covered in the Laboratory report filed on December 30, 1955. The analyses showed that for all food plants except coconuts, the Strontium-90 value approximated 4 percent of the total activity present in the samples. For coconuts, the percentage is 1 percent. No Strontium-90 was found in the soft tissues of pelagic or reef fish or clams. The bone sample of a single fish, a bonito, yielded a maximum Strontium-90 activity of 8 percent. Neither the muscle or bone of the terns contained Strontium-90, but the coconut crab, which feeds principally on land plants, had Strontium-90 levels of 3 percent in the muscle and 12 percent in the liver (hepato-pancreas), where calcium salts are stored. The radioisotopes in salts leached from the carapace [shell] of the crab were found to consist entirely of Strontium-90 and Yttrium-90.

Held points out in his reference notes just how misinformed the public became due to 1956 Presidential Election Campaign mass media Strontium-90 fallout propaganda fake news, by quoting the November 26, 1956 *Newsweek*, which headed its article on page 64 "The 'Unpleasant Debate'" (quote from this follows):

- Strontium-90 ... is without doubt the most technical subject ever injected into a political campaign. ... In no previous campaign had so many scientists been inspired to send so many statements to newspapers. Never had the voting public had such a difficult, if not insuperable, job of trying to understand the arguments involved.

Sadly for Chuck Hansen and Richard Rhodes' efforts to turn Hines into left wing lying anti-nuclear propaganda, Hines is not done after debunking Strontium-90 mythology. Hines then turns his attention to debunking the long-lived 30-years half life Cesium-137 mythology, stating on page 300:

- ... trials with potassium fertilizer [*potassium saturation blocks most chemically-similar cesium uptake, as calcium saturation blocks most chemically-similar strontium uptake, just as stable iodine saturation blocks iodine-131 uptake, etc*], both in the field and in the experimental greenhouses, had resulted in marked reduction by plants of radiocesium uptake. These results were consistent with the fact that plants of contaminated areas of the Marshall islands ... are high in radiocesium ... resulting from the deficiencies of potassium [*which is chemically similar to cesium*] in island soils and the consequent hunger of plants for potassium and receptivity to cesium [as a

substitute for potassium; eventually, decades later, KCl was applied to the soil of Bikini Atoll to cut uptake of cesium-137; as always, almost without exception, whenever a mainstream "scientist" makes an amazing discovery, they issue it in an obscure, obfuscating, long-winded, overly-cautious report to avoid the risk of upsetting some fashionable mass media apple-cart, so it either gets ignored for decades, or for eternity, instead of being quickly implemented to help decent folk survive in the comfortable safety they need].

On, and while we're ranting about what Chuck Hansen and Richard Rhodes ignored in Hines' book, we must be sure to quote Hines debunking the the populist fake news claim that Aikichi Kuboyama, radio operator of tuna trawler Fukuryu Maru, was killed by radiation, when in fact he died from liver failure complications related to the fact that Japanese doctors gave him infected blood during one of a vast number of very small blood transfusions (their medical procedure at the time was to give a lot of very small small blood transfusions, not a few large transfusions; this massively increased the risk of infected blood). Hines, page 172:

- ... Aikichi Kuboyama ... would die on September 23 [1954] of a liver disorder complicated by the development of jaundice and pneumonia. ... There is little doubt that the occasion was seized by left-wing groups to stir resentment against the government of occupied Japan and against the United States, but the scope and depth of the reaction indicate that the incident had touched emotional and economic [*tuna sales and consumption practically ceased, temporarily, due to fallout contamination fears, causing an immediate and drastic effect on the nutrition of virtually all Japanese families*] nerves of great sensitivity. ... Japan lives by the sea, and her fishing industry is basic to both her economy and her diet. In 1952, Japan's consumption of marine products had been 4,285,000 tons, of which 93 percent was used directly as food for her people. The industry employed more than 330,000 workers ...

According to Associated Press dispatch dated March 16, 1954, interviewing that tuna trawler's Captain Hisakichi Tsutsui (quoted by Hines at page 170), Shinzo Suzuki, the crewmember on deck at 6:45am, March 1, 1954 just north of Naen Island (where they had tuna nets out and were sleeping prior to pulling the nets in), Rongelap Atoll, saw an apparent sunrise in the West (*without being blinded*, contrary to Jonathan Schell's lying propaganda book on Bravo, *Fate of the Earth*). That March 16, 1954 Associated Press release interview quotes Captain Tsutsui stating: "7 minutes later, we heard a deafening explosion, and then saw in the next instant a huge mushroom form shooting up into the distant sky. About 90 minutes after the blast, snow-white ashes began falling all around the ship." (This interview was published in Japan by the Yomiuri, the third biggest newspaper in Tokyo, on March 16, 1954, two days after the *Fukuryu Mari* arrived in Yaizu, Japan.) Instead of starting the engine, abandoning the fishing nets, and getting the hell out of the fallout area, all of the crew came

out of the cabin into the open deck, and began hauling in the nets of tuna while fallout was still descending on to them, receiving maximum contamination and severe beta burns from fallout adhering to moist, sweaty skin on the face and arms. Feet, protected by boots, had no beta burns.

The reason for this disaster is well known: money. The tuna trawler was owned by Kakuichi Nishikawa, and had departed from Yaizu City in Japan on January 22, 1954 to fish for tuna around Midway, far north of Rongelap. However, it would not land enough tuna at Midway and had to try other areas. The crew had been imprisoned in Indonesia for poaching tuna from their waters. So they, in desperation, tried the deserted seas near the nuclear test site of Bikini Atoll. Because the Yanks had kept Operation Castle secret, they didn't know when Bravo would be tested. They ended up, therefore, in the wrong place at the wrong time. No test at Bikini had been done since the Baker underwater shot of July 25, 1946, although Eniwetok (190 miles West of Bikini) had been used for test series in 1948 (Sandstone), 1951 (Greenhouse) and 1952 (Ivy). So they were not acting stupidly, just desperately in pulling in their nets during fallout! Their families needed income from tuna, the boat owner needed paying. To return having abandoned the very nice catch they had just found near Naen Island was unthinkable! Like many "bad decisions", when you know and understand the details, they become sad but inevitable, not ignorant folly.

The tuna trawler had arrived back at its home port of Yaizu on March 14, 1954, and it took a while to get Geiger counters from Tokyo to check that the cause of the injuries to the 23 crew was actually due to fallout, rather than (say) corrosive volcanic ash (which was not entirely unknown, due to various active volcanic islands in the Pacific), leading to the 2-day delay in publication of the news on March 16, 1954. What really made the disaster was the secrecy on the effects of nuclear weapons at that time. Fallout had occurred during previous tests, but most of the data was secret. Lewis Strauss, Chair of the US Atomic Energy Commission, and President Eisenhower (whose policy of anti-candor for public information releases was simply "keep them confused"), bear responsibility for Stalin-like duplicity in the March 11, 1954 US Atomic Energy Commisison PR (public relations press release) about the effects of 15 megaton Bravo fallout:

- During the course of a routine atomic test in the Marshall Islands, 28 United States personnel and 236 residents were transported from neighboring atolls to Kwajalein Island according to plan as a precautionary measure. These individuals were unexpected exposed to some radioactivity. There were no burns [*true, as for sunburn, they were delayed and it took 14 days for beta burns to appear, just after this March 11 dated press release was published in newspapers*]. All responded well. After the completion of the atomic tests, the natives will be returned to their homes. [*US Atomic Energy Commission Statement, 7:00pm, March 11, 1954.*]

On page 261, Hines states that Rongelap Island (the normally occupied largest island in the atoll, at the south of Rongelap Atoll) had a gamma dose

rate of only 0.03-0.04 mR/hour in September 1959, only a few times the natural background at Trafalgar Square in London (0.01 mR/hour), and lower than cosmic radiation dose rates in jet aircraft at normal cruising altitude, or in natural uranium ore hotspots. Hines also points out that the most heavily contaminated island in Rongelap Atoll, Naen Island in the extreme North-West of Rongelap Atoll, had a dose rate of only 0.18-0.25 mR/hour at that time, September 1959, 5.5 years after 15 megaton Bravo! Bikini Atoll was "discovered" (by the West) in 1825 by a Russian Navy Lieutenant, Otto von Kotzebue, during his second voyage in the Pacific. But he didn't discover anything, any more than Christopher Columbus was the first human being to set foot in North America! Such as historical lore, propaganda, fake new scams by the mass media. Like North America at the time Christopher Columbus set foot in the West Indies, Bikini Atoll was *already long since discovered and occupied by human beings, the Polynesians!* Shameful Luddite and Communist inspired and promoted anti-nuclear bigoted pseudo-scientific propaganda for Russian appeasement and radiation misinformation has terrorized many of the people of Bikini Atoll for decades.

This is a deliberate, calculated, hateful crime against humanity, that should be treated as deliberate terrorism. There is no other way to deal with abusive hysteria promoted by quacks in the BBC and other mass media and the many other anti-deterrence, anti-nuclear, war-mongering fake news "peace" bigotry fronts for thugs.

More: www.nukegate.orgwww.nukegate.org